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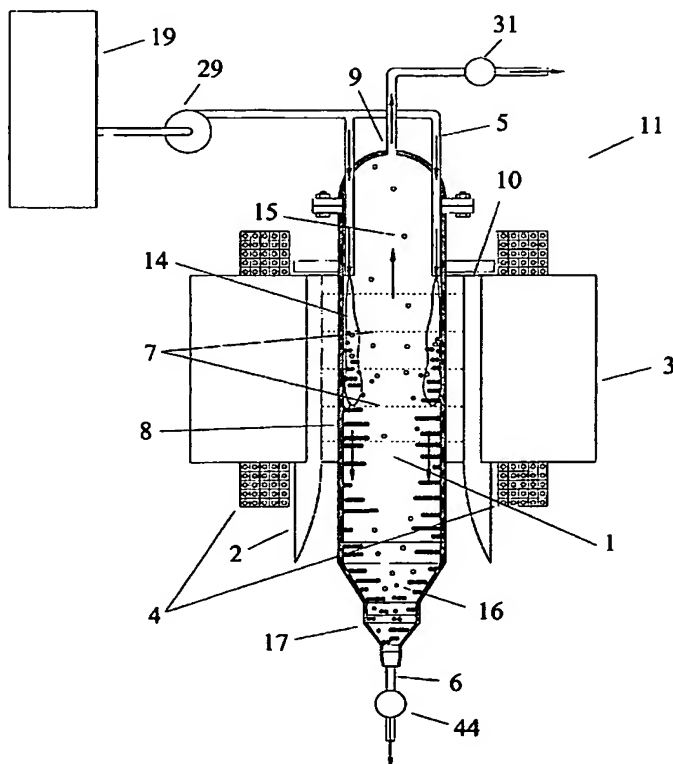
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(54) Title: APPARATUS AND METHOD FOR CONTINUOUS SEPARATION OF MAGNETIC PARTICLES FROM NON-MAGNETIC FLUIDS



(57) Abstract: A magnetic separator vessel (1) for separating magnetic particles from non-magnetic fluid includes a separation chamber having an interior and exterior wall, a top and bottom portion; a magnet (3) having first and second poles (2) positioned adjacent to the exterior wall, wherein the first pole is substantially diametrically opposed to the second pole; a inlet port (5) is directed into the top portion of the separation chamber, wherein the inlet port (5) is positioned adjacent to one of the first and second poles (2), wherein the inlet port (5) is adapted to transfer a mixture into the separation chamber; an underflow port (6) in communication with the bottom portion, wherein the underflow port (6) is adapted to receive the magnetic particles; and an overflow port (9) in communication with the separation chamber, wherein the overflow port (9) is adapted to receive the non-magnetic fluid.



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